AUTHOR INDEX

1981

Volumes 4–5

Throughout this Index, bold face numerals are used to denote the volume number; light-face numerals denote the pages.

RESEARCH-EXPOSITORY PAPERS

Auslander, L. and Tolimieri, R., *A matrix free treatment of the problem of Riemann matices*, **5**, 263

Berndt, Bruce C. and Evans, Ronald J., *The determination of Gauss sums*, **5**, 107

Bers, Lipman, *Finite dimensional Teichmüller spaces and generalizations*, **5**, 131

Cantor, Murray, *Elliptic operators and the decomposition of tensor fields*, **5**, 235

Dunford, Nelson, *Einar Hille*, **4**, 303

Evans, Ronald J. *See* Berndt, Bruce C.

Furstenberg, Harry, *Poincaré recurrence and number theory*, **5** 211

Goodearl, K. R., *Von Neumann regular rings: Connections with functional analysis*, **4**, 125

Kleene, Stephen C., *The theory of recursive functions, approaching its centennial*, **5**, 43, 364

Kra, Irwin, *Canonical mappings between Teichmüller spaces*, **4**, 143

Leray, Jean, *The meaning of Maslov's asymptotic method: The need of Planck's constant in mathematics*, **5**, 15

Nirenberg, L., *Variational and topological methods in nonlinear problems*, **4**, 267

Neuenschwander, E., *Studies in the history of complex function theory* II: *Intersections among the French school, Riemann and Weierstrass*, **5**, 87

Odifreddi, Piergiorgio, *Strong reducibilities*, **4**, 37

Ruelle, David, *Differentiable dynamical systems and the problem of turbulence*, **5**, 29

Schwartz, Laurent, *Geometry and probability in Banach spaces*, **4**, 135

Smale, Steve, *The fundamental theorem of algebra and complexity theory*, **4**, 1

Tolimieri, R. *See* Auslander, L.

Weinstein, Alan, *Symplectic geometry*, **5**, 1

RESEARCH ANNOUNCEMENTS

Aharonov, Dov and Srebro, Uri, *A short proof of the Denjoy conjecture*, **4**, 325

Alperin, Robert C. and Shalen, Peter B., *Linear groups of finite cohomological dimension*, **4**, 339

Baumslag, G., Dyer, E. and Miller, C. F., *On the integral homology of finitely-presented groups*, **4**, 321

Bell, Steven, *Smooth bounded strictly and weakly pseudoconvex domains cannot be biholomorphic*, **4**, 119

Björner, Anders, *The unimodality conjecture for convex polytopes*, **4**, 187

Burris, S. and McKenzie, R., *Decidable varieties with modular congruence lattices*, **4**, 350

Cattani, Eduardo and Kaplan, Aroldo, *On the local monodromy of a variation of Hodge structure*, **4**, 116

Chen, Kuo-Tsai, *On the Hopf index theorem and the Hopf invariant*, **5**, 67

Cherlin, Gregory, van den Dries, Lou and Macintyre, Angus, *Decidability and undecidability theorems for* PAC*-fields*, **4**, 101

Donagi, Ron, *The tetragonal construction*, **4**, 181

van den Dries, Lou. *See* Cherlin, Gregory

Dyer, E. *See* Baumslag, G.

Evans, E. Graham and Griffith, Phillip, *Syzygies of small rank*, **4**, 329

Fefferman, Robert, *Singular integrals on product domains*, **4**, 195

Gaber, Ofer and Kac, Victor G., *On defining relations of certain infinite-dimensional Lie algebras*, **5**, 185

Greene, Robert E. and Krantz, Steven G., *The stability of the Bergman kernel and the geometry of the Bergman metric*, **4**, 111

Griffith, Phillip. *See* Evans, E. Graham

Harrington, Leo and Shore, Richard A., *Definable degrees and automorphism of* $\mathfrak{D}$, **4**, 97

Jerison, David S. and Kenig, Carlos E., *The Neumann problem on Lipschitz domains*, 4, 203
Jiang, Boju (Po-Chu Chiang), *Fixed points of surface homeomorphisms*, 5, 176
Kac, Victor G. *See* Gaber, Ofer
Kapian, Aroldo. *See* Cattani, Eduardo
Kenig, Carlos E. *See* Jerison, David S.
Korenblum, Boris, *Cyclic elements in some spaces of analytic functions*, 5, 317
Krantz, Steven G. *See* Greene, Robert E.
Lewis, G., May, J. P. and McClure J., *Ordinary $RO(G)$-graded cohomology*, 4, 208
Macintyre, Angus. *See* Cherlin, Gregory
Majda, Andrew, *The existence and stability of multi-dimensional shock fronts*, 4, 342
May, J. P. *See* Lewis, G.
McClure, J. *See* Lewis, G.
McGehee, O. Carruth, Pigno, Louis and Smith, Brent, *Hardy's inequality and the Littlewood conjecture*, 5, 71
McKenzie, R. *See* Burris, S.
Meyer, R. E. *See* Painter, J. F.
Miller, C. F. *See* Baumslag, G.
Moran, Siegfried, *On a conjecture of Papakyriakopoulos*, 4, 189
Muller, David E. and Schupp, Paul E., *Context-free languages, groups, the theory of ends, second-order logic, tiling problems, cellular automata, and vector addition systems*, 4, 331
O'Brian, Nigel R., Toledo, Domingo and Tong, Yue Lin L., *Grothendieck-Riemann-Roch for complex manifolds*, 5, 182
Ramakrishnan, Dinakar, *A regulator for curves via the Heisenberg group*, 5, 191
Ramm, A. G., *Spectral properties of some nonselfadjoint operators*, 5, 313
Rosenberg, Jonathan and Schochet, Claude, *The classification of extensions of C^*-algebras*, 4, 105
Rubel, Lee A., *A universal differential equation*, 4, 345
Painter, J. F. and Meyer, R. E., *New connection method across more general turning points*, 4, 335
Patton, C. M., *On representations in cohomology over pseudo-Hermitian symmetric spaces*, 5, 63
Pigno, Louis. *See* McGehee, O. Carruth
Schochet, Claude. *See* Rosenberg, Jonathan
Schupp, Paul E. *See* Muller, David E.
Shalen, Peter B. *See* Alperin, Robert C.
Shore, Richard A. *See* Harrington, Leo
Smith, Brent. *See* McGehee, O. Carruth
Srebro, Uri. *See* Aharonov, Dov
Sullivan, Dennis, *For $n > 3$ there is only one finitely additive rotationally invariant measure on the n-sphere defined on all Lebesgue measurable subsets*, 4, 121
Thickstun, T. L., *Open acyclic 3-manifolds, a loop theorem and the Poincaré conjecture*, 4, 192
Toledo, Domingo. *See* O'Brien, Nigel R.
Tong, Yue Lin L. *See* O'Brien, Nigel R.
Tunnell, Jerrold, *Artin's conjecture for representations of octahedral type*, 5, 173
Van Daele, A., *Two weights with orthogonal supports but equal on a dense *-subalgebra*, 5, 179

BOOK REVIEWS

Abe, Eiichi. *See* Sweedler, Moss E.
Baldwin, John T., *Classification theory and the number of non-isomorphic models* by Saharon Shelah, 4, 222
Ball, Joseph A., *Operator colligations in Hilbert spaces* by Mikhail Livshits (Moshe Livsic) and Artem A. Yantsevich, 4, 357

Berger, M. S., *Nonlinear differential equations* by S. Fucik and A. Kufner, 4, 362
Biggs, N. L. *See* Kantor, William M.
Bloch, Spencer, *Etale cohomology* by J. S. Milne, 4, 235
Bloom, Frederick, *A first course in rational continuum mechanics*, Vol. I by C. Truesdell, 5, 359
Bollobás, Béla, *Combinatorial problems and exercises* by László Lovász, 4, 250
Busemann, Herbert, *Hilbert's fourth problem* by A. V. Pogorelov, 4, 87
Cordes, H. O. *See* Taylor, Michael E.
Dieck, Tammo tom. *See* May, J. P.
Edwards, Harold M. *See* Parry, Charles J.
Edwards, R. E. *See* Griffiths, H. B.
Engleking, Ryszard. *See* Keesling, James
Fishburn, Peter C., *Measurement theory: with applications to decisionmaking, utility, and the social sciences* by Fred S. Roberts, 4, 233
Fucik, S. *See* Berger, M. S.
Griffiths, H. B., *A formal background to mathematics* by R. E. Edwards, 5, 354
Gunning, R. C., *Families of meromorphic functions on compact Riemann surfaces* by Makoto Namba, 4, 353
Hartshorne, Robin, *Vector bundles on complex projective spaces* by Christian Okonek, Michael Schneider and Heinz Spindler, 5, 201
Hasse, Helmut. *See* Kaplansky, Irving
Heller, Alex, *Integral representations* by Irving Reiner and Klaus W. Roggenkamp, 4, 93
Hermann, Robert, *Elements of soliton theory by* G. L. Lamb, Jr., 5, 203
Higgins, J. R., *An introduction to nonharmonic Fourier series* by Robert M. Young, 5, 324
Hirschfield, J. W. P. *See* Sherk, F. A.
Jech, Thomas, *Descriptive set theory* by Yiannis N. Moschovakis, 5, 339
Jones, Peter W., *Introduction to H_p spaces* by Paul Koosis, 4, 246
Kambayashi, T., *Curves on rational and unirational surfaces*, by M. Miyanishi, 4, 239
Kantor, William M., *Permutation groups and combinatorial structures* by N. L. Biggs and A. T. White, 5, 197
Kaplansky, Irving, *Number theory* by Helmut Hasse, 4, 249
Keesling, James, *Dimension theory* by Ryszard Engelking, 5, 77
Kemperman, J. H. B., *Inequalities: Theory of majorization and its applications* by Albert W. Marshall and Ingram Olkin; and *Probability inequalities in multivariate distributions* by Y. L. Tong, 5, 319
Koosis, Paul. *See* Jones, Peter W.
Krantz, Steven G., *Function theory in the unit ball of C^n* by Walter Rudin, 5, 331
Kufner, A. *See* Berger, M. S.
Lamb, G. L. Jr. *See* Hermann, Robert
Livshits, Mikhail (Livsic, Moshe). *See* Ball, Joseph A.
Lovász, László. *See* Bollabás, Béla
Macdonald, I. G. *See* Stanley, Richard P.
Marshall, Albert W. *See* Kemperman, J. H. B.
Massey, William S. *See* Vick, James W.
May, J. P., *Transformation groups and representation theory* by Tammo tom Dieck, 4, 90
Milne, J. S. *See* Bloch, Spencer
Miyanishi, M. *See* Kambayashi, T.
Moschovakis, Yiannis N. *See* Jech, Thomas
Namba, Makoto. *See* Gunning, R. C.
Okonek, Christian. *See* Hartshorne, Robin
Olkin, Ingram. *See* Kemperman, J. H. B.
Ostrom, T. G., *Translation planes* by Heinz Lüneburg, 4, 215
Parlett, Beresford N. *See* Stewart, G. W.
Parry, Charles J., *Fermat's last theorem, a genetic introduction to algebraic number theory* by Harold M. Edwards; and 13 *lectures on Fermat's last theorem* by Paulo Ribenboim, 4, 218

Pogorelov, A. V. *See* Busemann, Herbert
Reiner, Irving. *See* Heller, Alex
Ribenboim, Paulo. *See* Parry, Charles J.
Roberts, Fred S. *See* Fishburn, Peter C.
Roggenkamp, Klaus W. *See* Heller, Alex
Rowen, Louis Halle. *See* Small, Lance W.
Rudin, Walter, *See* Krantz, Steven G.
Schechter, Martin. *See* Faris, William G.
Schneider, Michael. *See* Hartshorne, Robin
Shelah, Saharon. *See* Baldwin, John T.
Sherk, F. A., *Projective geometries over finite fields* by J. W. P. Hirschfield, 4, 213
Small, Lance W., *Polynomial identities in ring theory* by Louis Halle Rowen, 5, 329
Spindler, Heinz. *See* Hartshorne, Robin
Srinivasan, Bhama. *See* Steinberg, Robert
Stanley, Richard P., *Symmetric functions and Hall polynomials* by I. G. Macdonald, 4, 254
Steinberg, Robert, *Representations of finite Chevalley groups* by Bhama Srinivasan, 5, 79
Stewart, G. W., *The symmetric eigenvalue problem* by Beresford N. Parlett, 4, 368
Sweedler, Moss E., *Hopf algebras* by Eiichi Abe, 5, 349
Taylor, Michael E., *Elliptic pseudo-differential operators—an abstract theory* by H. O. Cordes, 5, 73
Tong, Y. L. *See* Kemperman, J. H. B.
Truesdell, C. *See* Bloom, Frederick
Vick, James W., *Singular homology theory* by William S. Massey, 4, 229
White, A. T. *See* Kantor, William M.
Yantsevich, Artem A. *See* Ball, Joseph, A.
Young, Robert M. *See* Higgins, J. R.